

## ABSTRACT

IMAGE PROCESSING METHOD AND APPARATUS

An apparatus (2) for matching features in images of objects taken from different viewpoints is provided comprising: an image buffer (60) for receiving image data; and output buffer (62) for outputting pairs of matched features and processing means (64-78) for processing received image data to determine matched pairs of features in images. The processing means (64-78) includes a detection module (72) for detecting features at a number of different scales to account for the possibility that a feature in one image may correspond to a larger or smaller feature in another image; a characterization module (74) for generating characterization data for selected features where the characterization data is substantially independent of changes of scale, and the effects of stretch and skew resulting from viewing objects from different viewpoints; and a matching module (76) for outputting as pairs of matched features, features which most closely correspond to each other which are unambiguously better matches than any alternative match between features in different images.

Refer to Figure 5